

549,824

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number
WO 2004/089531 A1

- (51) International Patent Classification⁷: **B01J 19/00**, G01N 33/551, 33/543
- (21) International Application Number: PCT/EP2004/003668
- (22) International Filing Date: 6 April 2004 (06.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03447091.4 10 April 2003 (10.04.2003) EP
- (71) Applicant (for all designated States except US): **PAM-GENE B.V.** [NL/NL]; Burgemeester Loeffplein 70a, NL-5211 NL Den Bosch (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WU, Ying** [NL/NL]; Lankforst 14-76, NL-6538 JC Nijmegen (NL). **RUIJTEN-BEEK, Robby** [NL/NL]; Fivelingo 111, NL-3524 BK Utrecht (NL).
- (74) Agents: **DE CLERCQ, Ann et al.**; De Clercq, Brants & Partners, E. Gevaertdreef 10a, B-9830 Sint-Martens-Latem (BE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declaration under Rule 4.17:**
— of inventorship (Rule 4.17(iv)) for US only
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR IMMOBILIZING BIOMOLECULES ON METAL OXIDE SUBSTRATES

(57) Abstract: The present invention relates to an improved method for providing biomolecules on a metal oxide substrate. In another aspect, the invention relates to a metal oxide substrate, having a surface that is coated with a polymer, said substrate having biomolecules immobilised thereon, wherein said biomolecules are immobilized on said coated surface of said substrate by covalent binding, by means of electromagnetic irradiation. In another aspect, the invention relates to the use of a metal oxide substrate according to the invention for performing probe-based assays.

WO 2004/089531 A1